

Para-acetophenetidin copper is put up in glycerin base, so that one cubic centimeter contains approximately one-sixteenth grain of metallic copper, and this is an average dose. The injections should be given every four to five days intramuscularly in the gluteal region. As the glycerin is thick, it is best to draw it into the syringe before the needle is applied.

The lesions usually begin to disappear after the third or fourth injection, and ordinarily twelve injections suffice to clear the ordinary case, but in one case I found it necessary to give thirty-two injections, as the eruption would reappear in mitigated form at each catamenial period.

No untoward effects have been observed from the injections, but they are painful, the patients complaining of a dull ache extending down the leg, and this may persist for several hours. Occasionally the injections are painless. No indurated areas have been observed.

In addition to its more or less local action, copper seems to act as a tonic, possibly due to its catalytic action. One patient gained eighteen pounds in two months following a few injections, and refused further treatments on that account. Others have refused to continue treatment on account of the pain, and in these I have injected novocain previous to the copper injection. The combining of copper chemically with any of the known local anesthetics makes them lose their anesthetic properties. The writer of this report will send the name of the makers of this preparation to any colleagues who are interested.

Fox Theatre Building.

## SUBPHRENIC ABSCESS—WITHOUT PREVIOUS OPERATION

### REPORT OF CASE

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**D.** M., male, age thirty-two, was brought 175 miles over bad roads for treatment on April 7, 1932.

**History.**—One week previously (April 1) at 4 p. m. he began to have severe cramps in his abdomen. They continued to get worse and about 6 p. m. localized more definitely in the epigastric region. His family physician was called and a narcotic given. He vomited several times during the night, at which time the pain would get worse for a while, radiating to front of right side of chest and to right back. By noon of the following day the pain gradually subsided, leaving an extremely painful, swollen right epigastrium and hypochondrium. He had taken castor oil and bowels were acting freely. He now has pain on deep breathing or on movement. There is also noctidrosis. Past history was negative except for attacks of "indigestion" over a period of ten to twelve years.

**Examination.**—Temperature was 100.2, pulse 84. Short, rapid breathing and the appearance of a very sick man. No jaundice. There was dullness in chest, anteriorly, from fourth rib to three centimeters below costal margin; posteriorly, flatness from angle of scapula down. No breath sounds over right lower lobe. Increased breath sounds on left side of chest. There was a very sensitive, slightly swollen area in right epigastrium. The lower abdomen was soft and

not tender. White blood count was 14,500 with 75 per cent polynuclears. Urinalysis was negative. Fluoroscopic and radiographic examination showed right side of diaphragm much higher than normally, with no perceptible movement. There was no change in density above the diaphragm. The lung fields were normal in appearance. A diagnosis of subdiaphragmatic abscess, most likely resulting from an acute perforative gastric ulcer, was made and operation advised.

**Operative Findings.**—In considering operative treatment the best method of approach was discussed and, because of the strong probability of "pointing," it was decided to follow the abdominal route and incise over the sensitive, swollen area in the right epigastrium. The right rectus muscle was retracted outward and the falciform ligament was directly under the incision. There was no bulging here, however, and probing did not disclose any discharge. On further examination, on the lesser curvature of the stomach was found a perforated gastric ulcer, well sealed with fibrinous exudate, apparently healing well. The gall-bladder was normal. While exploring this region with the gloved hand, following along the gall-bladder sulcus up to and over the edge of the liver, a finger penetrated an abscess cavity covering the whole right dome of the liver. There was a gush of sanguinopurulent fluid with some odor. After evacuation of this fluid, one spit rubber drainage tube was inserted over the dome of the liver and another to the lesser gastric curvature. The general peritoneal cavity had been more or less excluded by the transverse colon and mesocolon. The operative wound was closed in layers around the drainage tubes.

**Postoperative Course.**—This was uneventful, the temperature remaining normal after the fourth day, when the drainage tubes were removed and all drainage stopped after the twentieth day. He was discharged from the hospital on the twenty-fifth day. Since his discharge from the hospital he has been on a restricted convalescent ulcer diet. On June 16, 1932, his weight was 128½ pounds, his best previous weight having been 134 pounds. Fluoroscopic examination showed good excursion of right diaphragm and he has made a complete recovery.

**Comment.**—The majority of cases of subphrenic abscess reported have been postoperative. This is an exception. This case is also interesting in that the acute perforative gastric ulcer healed without operation.

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**Vitamin D Milk.**—Important problems in milk control were discussed at a meeting of the New York Department's Advisory Committee on Milk Sanitation, held in Albany on October 13. The subject of vitamin D milk was considered at length. The vitamin D content of milk fat can be materially increased by several measures, the simplest and most practical being (1) the feeding of irradiated yeast to cows, and (2) the addition to the milk of a special concentrated cod-liver oil. Both of these procedures are patented, each patent being held by a teaching institution.

Much is claimed by the organizations selling vitamin D milk for the value of this product in special cases. Thus far, little knowledge is available as to the possible deleterious effect upon normal persons of a steady diet high in vitamin D. The committee recommends that for the present and until further information is obtained, the department take a neutral position, with the understanding that dairymen or milk dealers who have adopted these procedures be given no assurance that their continued use will be permitted. At the present time a small amount of "certified" vitamin D milk to which the vitamin is added by the feeding method is being sold in New York State.